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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,602	06/25/2003	Mutsuko Kondo	500.42890X00	8279
24956 7590 07/02/2007 MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER CAO, DIEM K	
			ART UNIT 2194	PAPER NUMBER
			MAIL DATE 07/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,602

Applicant(s)

KONDO ET AL.

Examiner

Diem K. Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/25/03, 8/9/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-11 are presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 6/25/2003 and 8/9/2006 are being considered by the examiner.

Specification

4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See pages 1, 2, 8 and 9.

See MPEP § 608.01.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "said second object" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4).

As to claim 1, Kamen teaches a distributed object controlling method, comprising the steps of

- sending, when executing an object (enterprise bean 6) in a first computer (client 8, see Fig. 2), a retrieval request to a second computer for providing a naming service (The client 8 ... JNDI 18 ... enterprise bean 6; page 2, paragraphs 9-10), and
- executing the object on the basis of object reference information acquired as the response to the retrieval request (client 8 invokes operations ... interface 14; page 2, paragraph 11 and At runtime, the client ... enterprise bean 6; page 3, paragraph 31),

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- wherein the distributed object controlling method further comprises the steps of:
 - judging, when executing the object, whether or not the object reference information on the object has been stored in a first reference-information storage area into which the acquired object reference information is stored (When the client 8 ... in the client cache; page 3, paragraph 32), and,
 - if the object reference information has been stored therein (If the instance of the proxy 26 exists in the client cache; page 3, paragraph 32),
 - sending an execution request for executing the object on the basis of the stored object reference information (When the client 8 invokes ... to the client 6; page 4, paragraphs 33-35).

Kamen does not explicitly teach the retrieval request including the object name of the object. However, Sundsted teaches the retrieval request including the object name of the object (A naming service ... locate object by name; Part 1, page 2, section 'An introduction to naming service').

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Sundsted to the system of Kamen because Sundsted provides details as how to use the JNDI service to locate object in the system.

As to claim 2, see rejection of claim 1 above. Kamen further teaches

- if the object reference information has been not stored therein (If the proxy instance does not exist in the client cache 22; page 3, paragraph 32),

- sending a retrieval request to the second computer for providing the naming service (the client runtime 24 ... the proxy instance; pages 3-4, paragraph 32), the retrieval request including the object name of the object (see discussion regarding object name in Sundsted in the claim 1 above),

- storing object reference information and the object name of the object into the first reference-information storage area, the object reference information being acquired as the response to the retrieval request (The client runtime 24 also stores a reference ... in the proxy instance; pages 3-4, paragraph 32), and

- sending an execution request for executing the object on the basis of the acquired object reference information (When the client 8 invokes ... to the client 6; page 4, paragraphs 33-35).

As to claim 11, it is the same as the method claim 1 except this is a system claim, and is rejected under the same ground of rejection.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) further in view of Hamilton et al (U.S. 5,287,507).

As to claim 3, see rejection of claim 1 above. Notes that the different is the name of the storage ("first reference-information storage area" vs. "second reference-storage area"). Kamen further teaches sending a storage request to the second computer for providing the naming service (page 4, paragraph 39). Sundsted teaches the storage request including the object name of

the object (A naming service ... locate object by name; Part 1, page 2, section 'An introduction to naming service').

Kamen and Sundsted do not teach if the object reference information has been not stored therein, judging whether or not the object exists within an identical process in the first computer, and if the object exists within the identical process therein, storing the object name of the object and the object reference information on the object into the second reference-information storage area. However, Hamilton teaches two programs in the same computer can access the same object using an object handler and a copy of the handler (col. 5, lines 19-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Hamilton to the system of Kamen and Sundsted because Hamilton provides a method for clients programs to have the ability to communicate and user references to object in a way which improves the benefits of local machine caching, thus the performance of the Kamen system would improve because less network communication.

9. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) further in view of Choy et al. (U.S. 5,960,194).

As to claim 4, Kamen and Sundsted do not teach if failure information has been acquired as the response to the execution request, deleting all of object names and object reference information stored in the first reference-information storage area. However, Zhao teaches if failure information has been acquired as the response to the execution request, deleting all of

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object names and object reference information stored in the first reference-information storage area (page 3, paragraph 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Zhao to the system of Kamen and Sundsted because Zhao teaches a method for transparent failover among object references in the system (abstract).

As to claim 5, see rejection of claim 4 above.

As to claim 6, see rejection of claim 4 above. Although Zhao does not explicitly teach the failure information including an object name that has caused a failure, it is obvious that the failure information should include the object name so the interceptor can use it to connect to other server (page 3, paragraph 36).

As to claim 7, see rejection of claim 6 above.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) and Hamilton et al (U.S. 5,287,507) further in view of Choy et al. (U.S. 5,960,194).

As to claim 8, see rejection of claim 4 above. Zhao does not teach sending a deletion request to the second computer for providing the naming service, the deletion request including the object name of the second object. However, Choy teaches after delete the object reference in

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the local cache, a deletion request is sent to the server that has global cache (col. 16, lines 35-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Choy to the system of Kamen, Sundsted and Zhao because Choy teaches a method to keep the data in the local machine and server synchronized.

11. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) further in view of Bortvedt (Functional Specification for Object Caching Service for Java, 2.0).

As to claim 9, Kamen and Sundsted do not teach the limitations of this claim. However, Bortvedt teaches

when storing the acquired object reference information and the object name into the first reference-information storage area, storing the object name therein after registration point-in-time has been brought into corresponding with the object name (Each object in the cache ... Time to Live; page 6, section 2.1.2), and

when a first predetermined time has elapsed (When an application ... object; page 4, last paragraph),

judging whether or not each registration point-in-time has elapsed by a second predetermined time, the each registration point-in-time being stored after having been brought into correspondence with the each object stored in the first reference-information storage area (Idle time; page 7, and page 4), and

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deleting, from within the first reference-information storage area, an object name and object reference information whose registration point-in-time has corresponded to the second predetermined time (invalidate by the cache; page 4, last paragraph).

Although Bortvedt does not explicitly teach sending a retrieval request to the second computer for providing the naming service, the retrieval request including the object name, and storing, into the first reference information storage area, object reference information, the object name, and a registration point-in-time acquired as the response to the retrieval request, Bortvedt teaches the object reference can be updated (page 4). It would have been obvious to one of ordinary skill in the art that the Bortvedt can be modified to update the object after deleting the one in the cache or request for the same object again when the object is requested by the client.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bortvedt to the system of Kamen because Bortvedt provides a method that allows applications to share objects across requests, across users and coordinates the life cycle of the objects across processes (page 3).

As to claim 10, see rejection of claim 9 above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
June 21, 2007



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SUPERVISORY PATENT EXAMINER